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REMARKS

Claims 14-26 and 28-34 are in the application. Claims 19 and 29 are presently amended, and new claim 34 is added. Due consideration of the amended and new claims is respectfully requested.

In the Office action of May 13, 2004, claims 19 and 29 were objected to as having indefinite terminology ("an output"). The present amendment corrects the claim language as suggested by the Examiner at page 2, item 2 of the action.

Claims 15, 19-21 and 23 were rejected as being unpatentable under 35 U.S.C. § 103(a) over Euro Patent Application 0 905 528 (Smith). See pages 2-3 of the action. Claim 25 was also rejected as unpatentable over Smith, in view of US Patent 5,199,109 (Baker). Office action, pages 3-4. The remaining claims were held to be allowable if rewritten to overcome the formal objections and not to depend on a rejected base claim.

Independent claim 19 is now amended both to meet the Examiner's formal objection, and to point out certain features of the presently claimed multi-mode receiver that distinguish it from the cited art. Specifically, claim 19 calls for one or more processors to be coupled to outputs of the first and the second IF channels for demodulating and processing first and second IF signals that are passed to the channel outputs, and for the processors to be configured to process the first and the second IF signals simultaneously. See original specification at, e.g., pages 11-12. New claim 34 depends from allowable claim 29, and also calls for processor stages to

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be configured to process simultaneously the first and the second IF signals that are output from the corresponding IF channels. Thus, as presently claimed, applicant's receiver is capable of detecting and processing two different signal streams simultaneously, viz., first, narrow band IF signals as they are passed to the output of the first IF channel; and second, wide band IF signals whenever they are present at the output of the second IF channel. That is, the detection and processing of the first and the second IF signals proceeds without loss of any information carried by either of the signals at any given time.

Smith (EP 0 905 528) shows in FIG. 3 a receiver architecture wherein a normal bandpass IF filter 33 and a narrow bandpass IF filter 34 both have inputs that are coupled to an output of a secondary IF amplifier 31. But the outputs of the filters 33, 34 are applied to corresponding inputs of a MUX switch 35, which, in turn, is controlled by a range control signal. That is, depending on the state of the switch 35, *only one* of the two filter outputs is passed on for detection and processing.

Operation of the Smith receiver therefore requires prior knowledge of which of the two IF filter outputs is to be selected for further processing. And, once the output of one filter is selected, any information that might be present in the output of the other filter is lost during the time signals output from the one filter are demodulated and processed. By contrast, the receiver of applicant's claim 19 is autonomous in that no prior knowledge of transmitted information is necessary, and information that may be present simultaneously in both the first and the second IF signals will not be lost.

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In view of all the foregoing, allowance of the pending claims and passing of the application to issue, are respectfully solicited.

Change of Correspondence Address

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